

The scientific and practical importance of teaching STEM lessons in the secondary schools

Galib Sharifov

Author:

Galib Sharifov,
Associate Professor of
Azerbaijan State
Pedagogical University.
Azerbaijan, Baku.
E-mail:
galib_sharifov@mail.ru

Abstract. It is known that the 21st century is a century of technology. The peculiarity of this century is the solution of complex problems through the synergetic approach method. One of the approaches is the STEM program. The STEM program covers the acquisition of students' knowledge and skills on physics, chemistry, biology, mathematics, technology and engineering at the same time. These classes are successfully implemented in the foreign educational system. Graduates of the University education system of which based STEM program receive STEM professions. These professions are considered to be the most profitable profession in the world and the preparing of STEM specialized persons is one of the most important goals of world education systems. The article deals with the advantages of the STEM program, the importance of its application in lyceums, and the stages of teaching this program. It is shown that pupils in lyceum have a certain ability to think critically and logically. From this point of view STEM classes in lyceums are more appropriate. So, pupils in lyceums can acquire 2 or 3 science knowledge in complex at the same time. During STEM classes, pupils using synergetic approach to the solution of the tasks and they develop deeply their knowledge, skills and all the forms of their thinking. It has been established that the STEM lessons used in lyceum develop pupils' ability to correctly interpret the issue in multivariate situations by instilling self-discipline in them. In this article the stages of STEM lessons, the position of the teacher in these stages are explained in detail, and the examples of STEM lessons have been thoroughly analyzed from the pedagogical point of view.

Keywords:

STEM, synergistic
approach, active lesson,
lyceum.

DOI: 10.32906/AJES/683.2018.02.14

To cite this article: Sharifov G. (2018) *The scientific and practical importance of teaching STEM lessons in the secondary schools*. Azerbaijan Journal of Educational Studies. Vol. 684, Issue III, pp. 9–18

Article history

Received: 14.09.2018; Accepted: 16.10.2018